

Remarks

As a preliminary matter Applicant thanks the Examiner for kindly indicating that claims 15 and 16 are allowed. Applicant also thanks the Examiner for kindly indicating that previously pending claims 10, 11 and 17 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant has done this in the form of new claims 21, 22 and 26, respectively. In light of this, Applicant submits that new claims 21, 22 and 26 are allowable.

Claims 10, 11, 14 and 17-20 have been canceled. New claims 21-26 have been added. New claims 21-26 are original claims 10, 11, 18-20 and 17, respectively, rewritten in independent form. No new matter has been added. Applicant respectfully requests entry of this Amendment as it serves to cancel rejected claims, to add new claims that correspond to an equal or lesser number of claims that have been canceled, and to present rejected claims in better form for allowance or for consideration on appeal pursuant to 37 CFR 1.116(b)(1) and (2). Applicant respectfully requests reconsideration of the above-captioned application. Applicant reserves the right to prosecute the claims in their original form in a continuing application.

Claim 14 stands rejected under 35 U.S.C. § 102(e) over U.S. 5,851,609 (Baratuci et al.).

Applicant submits that the cancellation of claim 14 renders moot the rejection of claim 14 under 35 U.S.C. § 102(e) over Baratuci et al. and respectfully requests that it be withdrawn.

Claims 1, 2, 7, 12, and 13 stand rejected under 35 U.S.C. § 102(b) over U.S. 5,569,516 (Paeglis et al.).

Paeglis et al. disclose a composition consisting essentially of a copolymer that includes a mixture of ethylene, one or more alphaolefins, and optionally, a diene. Paeglis et al. further disclose that the copolymers can contain from about 60 % by weight to 90 % by weight ethylene and 10 % by weight to 40 % by weight propylene or other alphaolefin based on the weight of the copolymer. Paeglis et al. also disclose that single ply roofing membranes formed from their thermoplastic elastomers can include an oil adsorbent filler when the membrane also includes a large amount of plasticizer oil, e.g.,

60 parts per 100 parts elastomer. The oil adsorbent filler is included to reduce or eliminate bleed-out from the plasticizer oil.

Claim 1 is directed to an adsorbent composition that includes from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer, and from 20 % by weight to about 70 % by weight adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents, and combinations thereof, the composition being essentially free of film forming agent selected from the group consisting of butyl rubber, polyisobutylene and combinations thereof, wherein the composition adsorbs at least one of moisture and volatile organic species from the atmosphere to which it is exposed. Paeglis et al. do not teach a composition that adsorbs at least one of moisture and volatile organic species from the atmosphere to which it is exposed. The February 27, 2007 Office action takes the position that the disclosure at column 8, lines 27-40 of Paeglis et al. describes an adsorbent of volatile organic materials and indicates that oils are inherently volatile organic materials. There is no evidence of record that all oils are inherently volatile materials. Moreover, Paeglis et al. do not teach that their roofing membrane formulation is able to adsorb at least one of moisture and volatile organic species from the atmosphere to which it is exposed; nor is the roofing membrane of Paeglis et al. inherently able to adsorb at least one of moisture and volatile organic species from the atmosphere to which it is exposed. Paeglis et al. explain that the kaolin clay or oil adsorbing polymers are introduced into their roofing membrane formulation in sufficient amounts to adsorb the oil. Thus the kaolin clay or oil adsorbing polymer adsorbs the oil of the roofing membrane formulation. There is no teaching that the kaolin clay or oil adsorbing polymer retains an ability to adsorb moisture or volatile organic species from the atmosphere to which the roofing membrane formulation in which it is incorporated is exposed. Therefore Paeglis et al. do not expressly or inherently teach the composition of claim 1. Applicant submits, therefore, that the rejection of claim 1 under U.S.C. § 102(b) over Paeglis et al. is unwarranted and respectfully requests that it be withdrawn.

Claims 2, 7, 12 and 13 are distinguishable under U.S.C. § 102(b) over Paeglis et al. for at least the same reasons as set forth above in distinguishing claim 1.

Claims 3-6, 8 and 9 stand rejected under 35 U.S.C. § 103 over Paeglis et al.

Claim 3 depends from claim 1 and further specifies that the composition exhibits a melt flow time of no greater than 60 seconds at 190°C. Claim 4 depends from claim 1 and further specifies that the composition exhibits a melt flow time of no greater than 15 seconds at 190°C. Claim 5 depends from claim 1 and further specifies that the composition exhibits a melt flow time of less than 5 seconds at 190°C. To establish a *prima facie* case of obviousness based on a single prior art reference, the record must, *inter alia*, show a suggestion or motivation to modify the teachings of that reference. See *B.F. Goodrich Co. v. Aircraft Braking Sys. Corp.*, 72 F.3d 1577, 1582, 37 U.S.P.Q.2D (BNA) 1314, 1318 (Fed. Cir. 1996). “The motivation, suggestion or teaching may come explicitly from statements in the prior art, the knowledge of one of ordinary skill in the art, or, in some cases the nature of the problem to be solved.” *Kotzab*, 217 F.3d at 1370, 55 USPQ2d at 1317. Here there is no such teaching, suggestion or motivation. The deficiencies of Paeglis et al. set forth above in distinguishing claim 1 are incorporated herein and are sufficient by themselves to render the rejection of claims 3-5 under 35 U.S.C. § 103 over Paeglis et al. unwarranted. The rejection is further deficient in that the disclosure in Paeglis et al. pertaining to kaolin clay or oil adsorbing polymers being introduced into a roofing membrane formulation in sufficient amounts to adsorb the oil is specific to a roofing membrane formulation. Nothing in Paeglis et al. teaches or suggests that a roofing membrane formulation should exhibit any particular melt flow time—let alone a melt flow time of no greater than 60 seconds at 190°C. Moreover, there is no evidence of record that a roofing membrane formulation in general or the roofing membrane formulation of Paeglis et al. inherently exhibits a melt flow time of no greater than 60 seconds at 190°C. Accordingly, the skilled artisan would have no reason to modify the roofing membrane formulation of Paeglis et al. to achieve a melt flow time of no greater than 60 seconds at 190°C.

The fact that Paeglis et al. disclose that their thermoplastic elastomers can have flow indices in the range of about 0.1 to 100 and that they can be used in glazing is of no moment. Paeglis et al. do not teach or suggest the melt flow time of a composition that includes amorphous polyalphaolefin polymer, and from 20 % by weight to about 70 % by weight adsorbent. Paeglis et al. also do not teach or suggest using their roofing

membrane composition in glazing nor do they not teach or suggest using a composition that includes an amorphous polyalphaolefin polymer and an adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents, and combinations thereof, in glazing. Accordingly, for at least these additional reasons Paeglis et al. fail to render obvious the compositions of claims 3-5. Applicant requests, therefore, that the rejection of claims 3-5 under 35 U.S.C. § 103 over Paeglis et al. be withdrawn.

Claim 6 depends from claim 1 and further specifies that the composition includes from about 40 % by weight to about 70 % by weight adsorbent. The deficiencies of Paeglis et al. set forth above in distinguishing claim 1 are incorporated herein and are sufficient by themselves to render the rejection of claim 6 under 35 U.S.C. § 103 over Paeglis et al. unwarranted. Paeglis et al. is further deficient for at least the following additional reasons. Paeglis et al. do not teach or suggest including from about 40 % by weight to about 70 % by weight adsorbent in an adsorbent composition. Rather, Paeglis et al. disclose that the maximum amount of kaolin clay or oil adsorbing polymer that can be introduced in their roofing membrane formulation is 31 % (i.e.,  $[(120*60)/100]/[(120*60)/100] + 60 + 100$ )). Paeglis et al. thus fail to teach or suggest a required element of the composition of claim 6. Applicant submits, therefore, that the rejection of claim 6 under 35 U.S.C. § 103 over Paeglis et al. is unwarranted for at least this additional reason and respectfully requests that it be withdrawn.

Claim 8 depends from claim 1 and further specifies that the composition, when applied to a substrate and subjected to 88°C for one month, is essentially free from sag. The deficiencies of Paeglis et al. set forth above in distinguishing claim 1 are incorporated herein and are sufficient by themselves to render the rejection of claim 8 under 35 U.S.C. § 103 over Paeglis et al. unwarranted. The rejection is further deficient in that the disclosure in Paeglis et al. pertaining to kaolin clay or oil adsorbing polymers being introduced into a roofing membrane formulation in sufficient amounts to adsorb the oil is specific to a roofing membrane formulation. Nothing in Paeglis et al. teaches or suggests that a roofing membrane formulation should exhibit any particular amount of sag—let alone that it should be essentially free from sag when subjected to 88°C for one month. Moreover, Paeglis et al. provides no evidence a roofing membrane formulation in general or the roofing membrane formulation of Paeglis et al. is inherently free from sag

when subjected to 88°C for one month. Accordingly, the skilled artisan would have no reason to attempt to modify the roofing membrane formulation of Paeglis et al. to achieve a composition that is essentially free from sag after being subjected to 88°C for one month.

The fact that Paeglis et al. disclose that their thermoplastic elastomer can be used in glazing is of no moment. Paeglis et al. do not teach or suggest using their roofing membrane composition in glazing nor do they not teach or suggest using a composition that includes an amorphous polyalphaolefin polymer and an adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents, and combinations thereof, in glazing. Accordingly, the skilled artisan would have no reason to attempt formulate the composition of claim 8 from the disclosure of Paeglis et al. and further would have no clue as to how to do so. Applicant submits, therefore, that the rejection of claim 8 under 35 U.S.C. § 103 over Paeglis et al. is unwarranted and respectfully requests that it be withdrawn.

Claim 9 depends from claim 1 and further specifies that the composition passes the ASTM E1887 fog test. The deficiencies of Paeglis et al. set forth above in distinguishing claim 1 are incorporated herein and are sufficient by themselves to render the rejection of claim 9 under 35 U.S.C. § 103 over Paeglis et al. unwarranted. The rejection is further deficient in that the disclosure in Paeglis et al. pertaining to kaolin clay or oil adsorbing polymers being introduced into a roofing membrane formulation in sufficient amounts to adsorb the oil is specific to a roofing membrane formulation. Nothing in Paeglis et al. teaches or suggests that a roofing membrane formulation should pass the ASTM E1887 fog test. Moreover, Paeglis et al. contains no evidence that a roofing membrane formulation in general or the roofing membrane formulation of Paeglis et al. inherently passes the ASTM E1887 fog test. Accordingly, the skilled artisan would have no reason to attempt to modify the roofing membrane formulation of Paeglis et al. to achieve a composition that passes the ASTM E1887 fog test.

The fact that Paeglis et al. disclose that their thermoplastic elastomer can be used in glazing is of no moment. Paeglis et al. do not teach or suggest using their roofing membrane composition in glazing nor do they not teach or suggest using a composition that includes an amorphous polyalphaolefin polymer and an adsorbent selected from the

group consisting of moisture adsorbents, volatile organic adsorbents, and combinations thereof, in glazing. Accordingly, the skilled artisan would have no reason to attempt to formulate the composition of claim 9 from the disclosure of Paeglis et al. and further would have no clue as to how to do so. Applicant submits, therefore, that the rejection of claim 9 under 35 U.S.C. § 103 over Paeglis et al. is unwarranted and respectfully requests that it be withdrawn.

Previously pending claims 18-20, now claims 23-25, respectively, stand rejected under 35 U.S.C. § 103 over Paeglis et al. in view of a passage from Applicant's Specification referred to in the February 27<sup>th</sup> Office action as "applicant's discussion of the prior art."

The discussion of Paeglis et al. set forth above is incorporated herein.

The February 27<sup>th</sup> Office action points to page 5, lines 10-25 of Applicant's Specification as disclosing that the adsorbents of previously pending claims 18-20 are commercially available. The referenced portion of Applicant's Specification reads as follows:

The adsorbent of the composition is capable of adsorbing molecules present in the atmosphere to which the adsorbent is exposed. The adsorbent is selected based upon the characteristics of the application in which the adsorbent composition is to be used and the desired molecules to be adsorbed. The adsorbent can be selected to adsorb chemicals including, e.g., moisture, organic species (e.g., hydrocarbons, aromatics, and carbon dioxide), and combinations thereof. Preferably the adsorbent is an inorganic particulate material. Examples of useful adsorbents include natural zeolite (e.g., chabazite, gmelinite, levynite, erinite, mordenite and analcite), molecular sieves (e.g., alkali metal aluminosilicates), silica gel, silica-magnesia gel, silica-alumina gel, activated carbon, activated alumina, calcium oxide and combinations thereof. Suitable alkali metal aluminosilicate molecular sieves include, e.g., calcium, potassium, and sodium alkali metal aluminosilicates. Useful molecular sieves are available under the trade designations Molsiv® Adsorbent Type 13x, and Molecular Sieve Type 3A, Type 4A and Type 5A, which are all commercially available from UOP (Illinois) and molecular sieves available from W.R. Grace (Maryland). Preferably the adsorbent exhibits a particle size of no greater than about 50 to about 100 mesh.

Applicant's Specification, page 5, lines 10-25.

Claim 23, which is previously pending claim 18, is directed to an adsorbent composition that includes from 30 % by weight to 80 % by weight amorphous

polyalphaolefin polymer and from 20 % by weight to about 70 % by weight adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents, and combinations thereof, the adsorbent includes at least one of chabasite, gumerinite, levynite, erinite, mordenite and analcite, the composition being essentially free of film forming agent selected from the group consisting of butyl rubber, polyisobutylene and combinations thereof, and the composition adsorbs at least one of moisture and volatile organic species from the atmosphere to which it is exposed. In order to establish a *prima facie* case of obviousness, “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings.” M.P.E.P. 2142. The mere identification in the prior art of each element in a claim is insufficient to defeat the patentability of the claim as a whole. See, e.g., *In re Kahn*, 441 F.3d. 977 (Fed. Cir. 2006). Rather, to establish a *prima facie* case of obviousness based on a combination of elements disclosed in the prior art, the Office action must articulate the basis on which a conclusion that it would be obvious to make the claimed invention is reached. *Id.* This requires that the Office action contain an explanation as to the “reasons one of ordinary skill in the art would have been motivated to select the references and to combine them to render the claimed invention obvious.” *In re Rouffett*, 149 F.3d 1350, 1357-59 (Fed. Cir. 1998). When an Office action does not explain the motivation or the suggestion that would have led the skilled artisan at the time of the invention to the claimed combination as a whole, it is inferred that the obviousness conclusion is based on hindsight. *Id.* It is further well established that the suggestion or motivation to make the claimed combination must be found in the prior art and must not be based on Applicant’s disclosure. See, M.P.E.P. 2142. Here, the fact that Applicant’s Specification discloses that certain adsorbents are commercially available is of no moment unless the record also contains some teaching, suggestion or motivation to include the adsorbents disclosed in Applicant’s Specification in the composition of Paeglis et al. Here, there is no such teaching, suggestion or motivation.

Paeglis et al. is directed to compositions that are used to form roofing membranes (see, Paeglis et al., col. 7, lines 35-39). Paeglis et al. disclose that plasticizer oils are preferably included in the roofing membrane formulation (see, *Id.* at col. 8, lines, 11-12).

Paeglis et al. also disclose that when the plasticizer oils are used in large amounts, oil adsorbing mineral fillers such as kaolin clay or oil adsorbing polymers such as EPDM can be included in the formulation to reduce bleed out of plasticizer oil (see, *Id.* at col. 8, lines 27-34). However, nothing in Paeglis et al. teaches or suggests including chabasite, gumerinite, levynite, erinite, mordenite or analcite in their roofing membrane formulation in general or including chabasite, gumerinite, levynite, erinite, mordenite or analcite adsorbents in their roofing formulation to reduce bleed out of plasticizer oils in particular. In addition, nothing in Paeglis et al. teaches or suggests that chabasite, gumerinite, levynite, erinite, mordenite or analcite are oil adsorbing. Thus, the skilled artisan would not think to use chabasite, gumerinite, levynite, erinite, mordenite or analcite in the composition of Paeglis et al.

The passage from Applicant's Specification does not cure the deficiencies of Paeglis et al. As established above, it is not proper to use Applicant's Specification to provide the missing teaching, suggestion or motivation to modify the composition of Paeglis et al. The fact that certain adsorbents were available prior to Applicant's invention is of no moment. The fact that certain adsorbents were available prior to Applicant's invention does not, by itself, provide the requisite teaching, suggestion or motivation. Rather, there must be some teaching, suggestion or motivation in the prior art to use those adsorbents in the Paeglis et al. composition. Nothing in the record establishes a teaching, suggestion or motivation to use chabasite, gumerinite, levynite, erinite, mordenite or analcite in the roofing membrane formulation of Paeglis et al. Accordingly, the skilled artisan would have no reason to *sua sponte* modify the roofing membrane formulation of Paeglis et al in the manner set forth in the February 27<sup>th</sup> Office action. Applicant submits, therefore, that a *prima facie* case of obviousness of claim 23 has not been made and respectfully requests that the rejection of claim 23 under 35 U.S.C. § 103 over Paeglis et al. in view of a passage from Applicant's Specification be withdrawn.

Claim 24, which is previously pending claim 19, is directed to an adsorbent composition that includes from 30 % by weight to 80 % by weight amorphous polyalphaolefin polymer, and from 20 % by weight to about 70 % by weight adsorbent selected from the group consisting of moisture adsorbents, volatile organic adsorbents,



and combinations thereof, the absorbent including an alkali metal alumino-silicate, the composition being essentially free of film forming agent selected from the group consisting of butyl rubber, polyisobutylene and combinations thereof, wherein the composition adsorbs at least one of moisture and volatile organic species from the atmosphere to which it is exposed. Nothing in Paeglis et al. teaches or suggests including an alkali metal alumino-silicate in their roofing membrane formulation in general or including an alkali metal alumino-silicate in their roofing formulation to reduce bleed out of plasticizer oils in particular. In addition, nothing in Paeglis et al. teaches or suggests that an alkali metal alumino-silicate is oil adsorbing. Thus, the skilled artisan would not think to use an alkali metal alumino-silicate in the composition of Paeglis et al.

The passage from Applicant's Specification does not cure the deficiencies of Paeglis et al. for at least the same reasons set forth above in distinguishing claim 23. In particular, nothing in the record establishes a teaching, suggestion or motivation to use an alkali metal alumino-silicate in the roofing membrane formulation of Paeglis et al. Accordingly, the skilled artisan would have no reason to *sua sponte* modify the roofing membrane formulation of Paeglis et al in the manner set forth in the February 27<sup>th</sup> Office action. Applicant submits, therefore, that a *prima facie* case of obviousness of claim 24 has not been made and respectfully requests that the rejection of claim 24 under 35 U.S.C. § 103 over Paeglis et al. in view of a passage from Applicant's Specification be withdrawn.

Claim 25, i.e., previously pending claim 20, is distinguishable under 35 U.S.C. § 103 over Paeglis et al. in view of a passage from Applicant's Specification for at least the same reasons as set forth above in distinguishing claim 24.

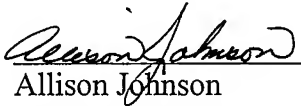
Applicant expressly notes that she does not acquiesce in the assertions contained in the February 27<sup>th</sup> Office action that are not addressed herein.

The claims now pending in the application are in condition for allowance and such action is respectfully requested. The Examiner is invited to telephone the undersigned should a teleconference interview facilitate prosecution of this application.

The Commissioner is hereby authorized to charge any additional fees that may be required and to credit any overpayment to Deposit Account No. 06-2241.

Respectfully submitted,

Date: April 26, 2007

  
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